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TOLER LAW GROUP
8500 BLUFFSTONE COVE
SUITE A201
AUSTIN, TX 78759

EXAMINER	
PRABHAKHER, PRITHAM DAVID	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/644,261	ANSARI ET AL.	
	Examiner	Art Unit	
	PRITHAM PRABHAKHER	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11,12,14,15,17-19,21,23,25-29 and 31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11,12,14,15,17-19,21,23,25-29 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/03/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-9, 11-12, 14-15, 17-19, 21, 23, 25-29 and 31-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11, 32, 35 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 11, 32, 35 and 37 mention that none of the image sensors includes a computer readable memory. However, Figures 1 and 2 of the application show that there is a memory present on the integrated circuit/substrate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-12, 14, 23, 25, 27, 34 and 37-*38 are* rejected under 35 U.S.C. 102(b) as being anticipated by Glassman et al. (US Patent No.: 5920337).

*Regarding **Claim 11**, Glassman et al. disclose an image capturing system (Figures 9-11) comprising:*

*an integrated circuit comprising (Mounting surface 60 which has the processing engine is fabricated on an integrated circuit, **Column 10, Line 63 to Column 11, Line 3**);*

*a first image module communicatively coupled to a processing engine (random logic 75) (One of the photosensors 68 and the associated lens 72 communicates with the random logic circuit 75, **Figure 10 and Column 10, Line 14 to Column 11, Line 3**), the first image module operable to capture first image information (The first image module can capture its own individual field of view, **Column 11, Lines 43 to 54**), wherein the first image module does not include a computer readable memory (There is no computer readable memory included on mounting surface 60);*

*a second image module communicatively coupled to the processing engine (random logic 75) (One of the other photosensors 68 and its associated lens 72 communicates with the random logic circuit 75, **Figure 10 and Column 10, Line 14 to Column 11, Line 3**), the second image module operable to capture second image*

information (The second image module can capture its own individual field of view, ***Column 11, Lines 43 to 54****); and*

the processing engine operable to perform an image processing function on information received from the first image module and the second image module (75 performs image processing functions, ***Figure 10 and Column 10, Lines 35-45****).*

In regard to ***Claim 12****, Glassman et al. disclose they system of claim 11, further comprising:*

a third image module communicatively coupled to the processing engine (One of the other photosensors 68 and its associated lens 72 that is not part of the first two photosensors 68, communicates with the random logic circuit 75, ***Figure 10 and Column 10, Line 14 to Column 11, Line 3****); and*

an interface operable to facilitate communication of a processing engine output to a computing device (Processed images can be sent to a computer, ***Column 4, Lines 62-63 of Glassman et al.****).*

Regarding ***Claim 14****, Glassman et al. disclose the system of claim 11, further comprising a selection mechanism operable to switch the information received by the processing engine from the first image information to the second image information. Each individual photodetector in Figure 10 has its own field of view. Therefore, it is inherent that there is a mechanism present that switches the information received by 75 from one view to another.*

*With regard to **Claim 23**, Glassman et al. disclose an image capturing method comprising:*

*correlating a plurality of digital image sensors with different views of a scene (Figure 10 and Column 11, Lines 43-53), wherein at least one of the plurality of digital image sensors comprises a lens integrated with a sensor (Each individual photosensor 68 and the associated lens 72 has its own field of view, **Figure 10 and Column 10, Lines 14-29 and Column 11, Lines 43-54**);*

*receiving information that represents a first view of the scene (One of the photosensors 68 and the associated lens 72 communicates with the random logic circuit 75, **Figure 10 and Column 10, Line 14 to Column 11, Line 3**);*

*receiving additional information that represents a second view of the scene (One of the other photosensors 68 and its associated lens 72 communicates with the random logic circuit 75, **Figure 10 and Column 10, Line 14 to Column 11, Line 3**);*

determining that the first view of the scene comprises a desired portion of the scene (A desired portion of the scene is captured); and

*allowing information to progress to the processing engine (75 performs image processing functions from the image signals acquired from the photosensors, **Figure 10 and Column 10, Lines 35-45**).*

*In regard to **Claim 25**, Glassman et al. disclose the method of claim 23, further comprising performing an image signal processing function on the information (75 performs image processing functions, **Figure 10 and Column 10, Lines 35-45**).*

*With regard to **Claim 27**, Glassman et al. disclose the method of claim 23, further comprising:*

*determining that the second view of the scene comprises another desired portion of the scene (A desired portion of the scene of a second view is captured, **Column 11, Lines 43-54**); and*

*allowing the additional information to progress to the processing engine (75) (One of the other photosensors 68 and its associated lens 72 communicates with the random logic circuit 75, **Figure 10 and Column 10, Line 14 to Column 11, Line 3**).*

*In regard to **Claim 34**, Glassman et al. disclose the image capture system of claim 11, wherein the first image module comprises a lens integrated with a sensor (One of the photosensors 68 and the associated lens 72, **Figure 10**).*

*Regarding **Claim 37**, Glassman et al. disclose the image capturing method of claim 23, wherein none of the plurality of digital image sensors includes a computer readable memory (Disk 60 does not have a computer readable memory on it, **Figure 10 and Column 10, Lines 14 et seq.**).*

*With regard to **Claim 38**, Glassman et al. disclose the image capturing method of claim 23, wherein an integrated circuit comprises the plurality of image sensors (Mounting surface/disk 60 which has the processing engine 75 and the plurality of image sensors is fabricated on an integrated circuit, **Column 10, Line 63 to Column 11, Line 3**).*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-6, 15, 19, 21 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glassman et al. (US Patent No.: 5920337) as applied to claim 11 above.

*In regard to **Claim 1**, Mates discloses an image capture system (Figures 9-11) comprising:*

*a processing engine operable to perform an image processing function (75 performs image processing functions, **Figure 10 and Column 10, Lines 35-45**);*

a first image sensor lens module (One of the photosensors 68 and the associated lens 72) comprising a first lens (one of the lens' 72) integrated with a first sensor (One of the photosensors 68), the first image sensor lens module operable to capture a first view of a scene and to output first information representing the first view

(Each individual photosensor 68 has its own field of view, ***Figure 10 and Column 10, Lines 14-29 and Column 11, Lines 43-54****);*

a second image sensor lens module (Another one of the photosensors 68 associated with a different lens 72) operable to capture a second view of the scene and to output second information representing the second view (Each individual photosensor 68 has its own field of view, ***Figure 10 and Column 10, Lines 14-29 and Column 11, Lines 43-54****); and*

a mounting surface on which the processing engine, the first image sensor lens module, and the second image sensor lens module are secured (Mounting surface 60 which has the processing engine 75 is fabricated on an integrated circuit, ***Column 10, Line 63 to Column 11, Line 3****).*

Although not explicitly mentioned in Glassman et al., official notice is taken by the examiner stating that it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a selector operable to selectively route at least a portion of scene view information to the processing engine, the scene view information comprising the first information and the second information, because it is necessary in routing the different angles of the viewed scene to a processing engine.

Regarding ***Claim 2****, Glassman et al. disclose the system of claim 1, further comprising:*

a support having an exterior surface that comprises the mounting surface, the support having generally spherical geometry ***(Column 10, Line 63 to Column 11, Line 3; Figure 10)****.*

In regard to ***Claim 3****, Glassman et al. disclose the system of claim 1, further comprising:*

a third image sensor lens module operable to capture a third view of the scene (Another lens module and sensor that is different from the first two sensor lens modules. Each individual photosensor 68 has its own field of view, ***Figure 10 and Column 10, Lines 14-29 and Column 11, Lines 43-54)****; and*

an integrated circuit comprising the first image sensor lens module, the second image sensor lens module, the third image sensor lens module, and the processing engine (Mounting surface 60 which has the processing engine 75 is fabricated on an integrated circuit, ***Column 10, Line 63 to Column 11, Line 3)****.*

With regard to ***Claim 5****, Glassman et al. do not explicitly disclose they system of claim 1, further comprising a triggering engine operable to signal the selector to route selected scene view information to the processing engine. Glassman et al. disclose that each individual photodetector captures its own individual field of view,* ***Column 11, Lines 43-53****. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a triggering engine present in the system to transfer the selected scene view information to the logic engine 75 for processing, because the*

triggering engine would select the specific portion to be sent for processing instead of having all viewed portions being sent in at the same time for processing.

*Regarding **Claim 6**, Glassman et al. do not explicitly disclose the system of claim 1, further comprising a microphone assembly communicatively couple to the processing engine to provide audio input. However official notice is taken saying it would have been obvious to one of ordinary skill in the art at the time of the invention to provide audio output to go along with the display of images because it is a means of communicating a message. Also, since official notice was taken on the office action dated (04/20/2007) regarding the provision of audio output to go along with the display of images, the Examiner's conclusion of common knowledge in the art is now taken to be admitted prior art because the Applicant failed to traverse the Examiner's assertion of official notice in reply to the office action in which the common knowledge statement was made. Please see MPEP 2144.03. Additionally, the provision of audio output to go along with the display of an image is now taken to be admitted prior art because the Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made.*

*Regarding **Claim 15**, Glassman et al. do not explicitly disclose the system of claim 11, wherein the processing engine is operable to simultaneously perform an image processing function on information received from the first image module and the second image module. However, official notice is taken saying it would have been obvious and well known to one of ordinary skill in the art at the time of the invention to*

perform simultaneous processing on the first and second images from the first and second image modules, because this is an accurate and well known method of generating one image from multiple image sensors.

Regarding ***Claim 19****, Glassman et al. do not disclose the system of claim 11, wherein the first image module comprises an optical zoom lens with autofocus. Official notice is taken by the examiner stating that it would have been obvious and well known at the time of the invention to have a lens that performed optical zoom with auto-focus. Having an optical zoom would have been better and more powerful than having a digital zoom and having the lens perform an auto-focus function would have saved the user the time and effort of manually focusing in on a scene to be imaged.*

(Official Notice was taken in the Office Action (04/20/2007) regarding having an image module comprise an optical zoom lens with autofocus. The Examiner's conclusion of common knowledge in the art is now taken to be admitted prior art because Applicant has failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made. Please see MPEP 2144.03. Additionally, having an image module comprise an optical zoom lens with autofocus.is now taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of Official Notice in reply to the Office Action in which the common knowledge statement was made).

*With regard to **Claim 21**, Glassman et al. disclose the system of claim 11, wherein the first image information represents a first view of a scene and the second image information represents a second view of the scene **(Column 11, Lines 43-53)**. However, Glassman et al. do not teach or disclose that at least a portion of the first information represents a portion of the scene captured in the second view. Foote et al. disclose a system wherein the first image information represents a first view of a scene and the second image information represents a second view of the scene **(**Looking at Figure 2A of Foote et al., Camera 1 has a different view (210) than Camera 2 (220). They each represent a different view of the participant 200**)**, and wherein at least a portion of the first information represents a portion of the scene captured in the second view **(**Looking at Figure 2A of Foote et al., Camera 1 represents a portion of participant 200 and Camera 2 represents a portion of the same participant 200**)**. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a portion of the first information represent a portion of the scene captured in the second view, because this is a well known way of capturing images and merging the images to form a final image with a wide angle field of view.*

*Regarding **Claim 35**, Glassman et al. disclose the image capture system of claim 1, wherein the first image sensor lens module does not include a computer readable memory **(**The disk 60 does not have a computer readable memory, **Figure 10 and Column 10, Lines 13 et seq.)**.*

*In regard to **Claim 36**, Glassman et al. disclose the image capture system of claim 1, wherein there is no optical component spatially situated between the first lens and the first sensor (Figure 13).*

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glassman et al. (US Patent No.: 5920337) as applied to claim 1 above and further in view of Kornblit et al. (US Patent No.: 6912090B2).

*In regard to **Claim 4**, Glassman et al. do not explicitly teach or disclose the system of claim 1, wherein the first and second image sensor lens modules are adjustable secured to the mounting surface. Kornblit et al. teach of lens being mounted on a MEMS controller that can cause the lens to move, **Column 2, Lines 18-22 of Kornblit et al.** It would have been obvious to one of ordinary skill in the art at the time of the invention to enable the microlens' disclosed in Glassman et al. to move, because this would help steer light reflected from an image to be captured directly on the associated photosensor.*

Claims 7-9 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glassman et al. (US Patent No.: 5920337) as applied to claims 1 and 23 above, and further in view of Mates (US Patent No.: 6987258B2) and Foote et al. (US Patent No.: 7015954B1).

*In regard to **Claim 7**, Glassman et al. disclose the system of claim 1, wherein the first image sensor lens module (One of the photosensors 68 and the associated lens 72) has an orientation (field of view of the lens) and the second image sensor lens module (One of the other photosensors 68 and the associated lens 72) has a different orientation (Each individual photosensor 68 has its own field of view, **Figure 10 and Column 10, Lines 14-29 and Column 11, Lines 43-54**), the system further comprising:*

*a triggering engine communicatively coupled to the selector and operable to signal the selector to route a specific portion of the scene view information to the processing engine (Glassman et al. disclose that each individual photodetector captures its own individual field of view, **Column 11, Lines 43-53**. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a triggering engine present in the system to transfer the selected scene view information to the logic engine 75 for processing, because the triggering engine would select the specific portion to be sent for processing instead of having all viewed portions being sent in at the same time for processing).*

*However, Glassman et al. do not disclose a directional determination assembly operable to detect a direction of an activity in the scene, the assembly further operable to output a signal that informs the triggering engine of the direction. Mates discloses an image capture system (**Figure 2 of Mates**) that has a plurality of photodetector elements, lenses and a processing engine incorporated on an integrated circuit, **Column 2, Line 56 to Column 4, Line 35 of Mates.** Mates also discloses that the*

system can be used to track objects and for monitoring processes (detection of activity in a scene), ***Column 7, Lines 8-17 of Mates.*** *It would have been obvious and well known to one of ordinary skill in the art at the time of the invention to enable the system of Glassman et al. detect activity in a scene as taught by Mates, because this enables the system to be used as a security system or a teleconferencing system in which selected users can be tracked.*

Glassman et al. and Mates do not specifically disclose the functions of motion detection and the assembly further outputting a signal that informs the triggering engine of the direction. Foote et al. disclose an array of cameras (Figure 1a of Foote et al.) that are used for motion detection. A motion sensor functions as a triggering engine that detects motion in a particular area and moves (selects) the appropriate camera to capture information from the location, ***Column 12, Lines 1 et seq. of Foote et al.*** *This information is then input to the combining device (processing engine),* ***Column 18, Lines 15-18 of Foote et al.*** *The camera array motion sensor detects the motion (activity) in a particular region (determined direction). Upon detecting a motion in a particular region, a signal (information) is sent to point another camera in the appropriate direction,* ***Column 12, Lines 22-32 of Foote et al.*** *It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the features taught by Foote et al. into the teachings of Glassman et al. and Mates, because in an event such as a teleconference, the camera can be automatically steered to capture the person speaking,* ***Column 3, Lines 59-61 of Foote et al.***

*Regarding **Claim 8**, Glassman et al., Mates and Foote et al. disclose the system of claim 7, wherein the triggering engine is further operable to signal the selector to route the second information to the processing engine in response to a determination that the second view should capture the activity (The camera array motion sensor detects the motion (activity) in a particular region (determined direction). Upon detecting a motion in a particular region, a signal (information) is sent to point a second camera in the appropriate direction, **Column 12, Lines 22-32 of Foote et al.** Images from the camera array are processed in the combining device, **Column 18, Lines 14-15 of Foote et al.** If it is determined that only the second view should capture the activity, the other views can be discarded, **Column 6, Lines 27-29 of Foote et al.** The view selection device may select only part of the combined image (second image part) for display, **Column 18, Lines 20-21 of Foote et al.**).*

*With regard to **Claim 9**, Glassman et al., Mates and Foote et al. disclose the system of claim 8, further comprising:*

a support having an exterior surface that comprises the mounting surface, the support having a geometry that facilitates differing orientations of the first and the second image sensor lens modules (Figure 10 of Glassman et al.); and

*an interface operable to communicatively couple an output of the processing engine to an external computing system (Processed images can be sent to a computer, **Column 4, Lines 62-63 of Glassman et al.**).*

*Regarding **Claim 28**, Glassman et al. discloses the method of claim 23, further comprising:*

*correlating the first view to a first image sensor of the plurality of image sensors and the second view to a second image sensor of the plurality of image sensors **(**See Claim 23 above**)**. However, Glassman et al. do not explicitly teach or disclose receiving a directional identification signal indicating that the first view contains a desired scene activity.*

*Mates discloses an image capture system **(Figure 2 of Mates)** that has a plurality of photodetector elements, lenses and a processing engine incorporated on an integrated circuit, **Column 2, Line 56 to Column 4, Line 35 of Mates.** Mates also discloses that the system can be used to track objects and for monitoring processes (detection of activity in a scene), **Column 7, Lines 8-17 of Mates.** It would have been obvious and well known to one of ordinary skill in the art at the time of the invention to enable the system of Glassman et al. detect activity in a scene as taught by Mates, because this enables the system to be used as a security system or a teleconferencing system in which selected users can be tracked.*

*Glassman et al. and Mates do not specifically disclose the functions of motion detection and the assembly further outputting a signal that informs the triggering engine of the direction. Foote et al. disclose an array of cameras (Figure 1a of Foote et al.) that are used for motion detection. A motion sensor functions as a triggering engine that detects motion in a particular area and moves (selects) the appropriate camera to capture information from the location, **Column 12, Lines 1 et seq. of Foote et al.** This*

information is then input to the combining device (processing engine), ***Column 18, Lines 15-18 of Foote et al.*** *The camera array motion sensor detects the motion (activity) in a particular region (determined direction). Upon detecting a motion in a particular region, a signal (information) is sent to point another camera in the appropriate direction,* ***Column 12, Lines 22-32 of Foote et al.*** *It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the features taught by Foote et al. into the teachings of Glassman et al. and Mates, because in an event such as a teleconference, the camera can be automatically steered to capture the person speaking,* ***Column 3, Lines 59-61 of Foote et al.***

Claims 17-18 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glassman et al. (US Patent No.: 5920337) as applied to claim 11 above, and further in view of Foote et al. (US Patent No.: 7015954B1).

With regard to ***Claim 17****, Glassman et al. do not explicitly teach or disclose the system of claim 11, wherein the first image module has a resolution and the second module has a different resolution. However, Glassman et al. do disclose that each photosensor captures its own individual field of view,* ***Column 11, Lines 43-53 of Glassman et al.*** *Foote et al. disclose two different cameras (Ch1 and Ch2 from Figure 10 of Foote et al.). Before merging the images from Ch1 and Ch2, it is taught that the regions from Ch1 corresponding to the regions in Ch2 differ in resolution (the regions are darker in Ch1),* ***Column 11, Lines 41-47 of Foote et al.*** *It would have been obvious*

to one of ordinary skill in the art at the time of the invention to have one sensor differ in resolution when compared to the other sensor, because each sensor captures a different scene of view and the light falling on each portion of the scene of view could vary.

In regard to ***Claim 18****, Glassman et al. do not disclose the system of claim 11, wherein the first image module comprises a digital zoom lens. Foote et al. disclose in their invention that digital zooming of a scene is possible with an array of cameras,* ***Column 1, Lines 26-30 of Foote et al.*** *It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate digital zooming taught by Foote et al. into the imaging system structure disclosed by Glassman et al., because digital zooming increases the size of the image to be captured and renders the image easier to view.*

Regarding ***Claim 32,*** *Glassman et al. disclose an image capturing method comprising:*

receiving image data from a plurality of image sensors ***(****Figure 10 and Column 10, Line 14 to Column 11, Line 3****)****, wherein an integrated circuit comprises a processing engine and at least one of the plurality of image sensors* ***(****Mounting surface 60 which has the processing engine 75 is fabricated on an integrated circuit,* ***Column 10, Line 63 to Column 11, Line 3****)****,*

wherein none of the plurality of image sensors includes a computer readable memory (None of the plurality of image sensors include a computer readable media);

providing image data related to one or more of the plurality of image sensors to the processing engine (75 performs image processing functions from the image signals acquired from the photosensors, ***Figure 10 and Column 10, Lines 35-45)****.*

However, Glassman et al. do not explicitly teach or disclose selectively providing image data related to one or more of the plurality of image sensors to the processing engine and processing the image data to produce an output. Glassman et al. also do not teach processing the image data to produce an output and transmitting the output to a video conferencing device. Foote et al. teach of receiving image data from a plurality of image sensors (Image data is received from the array of cameras (plurality of image sensors) 1510 in ***Figure 15*** *of* ***Foote et al.)****, and selectively providing image data related to one or more of the plurality of image sensors to the processing engine (The image data from 1510 is provided to the processing engine 1530 which combines the images,* ***Figure 15 and Column 18, Lines 9 et seq. of Foote et al.)****. Foote et al. then disclose processing the image data to produce an output (The image data is combined (processed) in 1530 and sent to the output 1570,* ***Figure 15 and Column 18, Lines 9 et seq. of Foote et al.)****. Finally, Foote et al. disclose transmitting the output to a video conferencing device (The output 1570 can be used as a video conferencing (teleconferencing) device,* ***Figure 155 and Column 1, Lines 33-45 of Foote et al.)****. It would have been obvious to one of ordinary skill in the art at the time of the invention to*

selectively choose the first and second information from the first and second sensors respectively to send to the processing engine, because this would give the user the control of selecting a particular and desired image, as opposed to unwanted images, to send to the processor for processing hence saving processing time. It would also have been obvious to one of ordinary skill in the art at the time of the invention to output the processed data to a video conferencing device since this is a well known way of sharing images to a particular audience of choice.

With regard to ***Claim 33,*** *Glassman et al. and Foote et al. disclose the method of claim 32, further comprising:*

receiving an audio signal via a directional microphone (The cameras can be controlled using a microphone/audio assembly, ***Column 15, Lines 1 et seq. of Foote et al.****); and*

selectively providing image data associated with a particular image sensor of the plurality of image sensors to the processing engine based on a direction associated with the audio signal (The cameras can be controlled using a microphone/audio assembly. Images can be tracked according to their audio output and combined in the processing engine, ***Column 15, Lines 1 et seq. and Column 16, Lines 1-26 of Foote et al.****).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to have an imaging system receive an audio signal via a microphone and selectively provide image data associated with an image sensor to the processing engine based on a direction associated with the audio signal, because tracking an

object by detection of an audio signal is a well known method of steering a camera to capture an image, ***Column 4, Lines 4-16 of Foote et al.***

Claim 26, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glassman et al. (US Patent No.: 5920337) as applied to claim 23 above, and further in view of Mates (US Patent No.: 6987258B2).

In regard to ***Claim 26****, Glassman et al. disclose the method of claim 23, further comprising:*

performing an image signal processing function on the information ***(****75 performs image processing functions,* ***Figure 10 and Column 10, Lines 35-45)****.*

However, Glassman et al. do not disclose initiating presentation of the information on a display after performing the image signal processing function. Mates discloses an image capture system ***(Figure 2 of Mates)*** *that has a plurality of photodetector elements, lenses and a processing engine incorporated on an integrated circuit,* ***Column 2, Line 56 to Column 4, Line 35 of Mates.*** *The output circuitry 207 (processing engine) is coupled to a display,* ***Column 6, Lines 45-46 of Mates****. It would have been obvious to one of ordinary skill in the art at the time of the invention to output the processed image on a display, because this is a well known method of sharing an image for people to view.*

*Regarding **Claim 29**, Glassman et al. disclose the method of claim 23, further comprising:*

*performing an image signal processing function on the information **(**75 performs image processing functions from the image signals acquired from the photosensors, **Figure 10 and Column 10, Lines 35-45)**..*

*However, Glassman et al. do not explicitly disclose outputting post processed image signal information. Mates discloses an image capture system **(Figure 2 of Mates)** that has a plurality of photodetector elements, lenses and a processing engine incorporated on an integrated circuit, **Column 2, Line 56 to Column 4, Line 35 of Mates.** The output circuitry 207 (processing engine) is coupled to a display, **Column 6, Lines 45-46 of Mates**. It would have been obvious to one of ordinary skill in the art at the time of the invention to output the processed image on a display, because this is a well known method of sharing an image for people to view.*

*In regard to **Claim 31**, Glassman et al. and Mates disclose the method of claim 29 further comprising streaming the post processed image signal information **(**Video image band, **Column 2, Lines 8-9 of Glassman et al.)**.*

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRITHAM PRABHAKHER whose telephone number is (571)270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pritham David Prabhakher
Patent Examiner
Pritham.Prabhakher@uspto.gov
/Pritham Prabhakher/
Examiner, Art Unit 2622

/Nhan T. Tran/

Primary Examiner, Art Unit 2622